Summary of Fishery Surveys
Timms Lake, Price County, 2016

WDNR's Fisheries Management Team from Park Falls completed an electrofishing survey to assess the abundance and size structure of largemouth bass and bluegill populations in Timms Lake. Electrofishing expanded the information we gained in a 2014 angling survey. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society. "Keeper size" is our own description applied to bluegill 7 inches and longer, based on known angler behavior.

Survey Effort

Price County holds an easement to a gated private road, which gave us access to public land on the west shore where we launched our large electrofishing boat. Located at the base of a hill, the unimproved site was marginally suitable as a makeshift boat landing. On June 2nd, 2016 we sampled the entire 0.80-mile shoreline in 0.38 hours when water temperature averaged 68.3˚F. Based on our survey timing and water temperature, we are confident that our samples represent adult population status.

Habitat and Access Characteristics

Timms Lake is a 19-acre seepage lake located at the base of Timms Hill, Wisconsin's highest point 1,952 feet above sea level. The southern third of the lake lies within Timms Hill County Park in southeastern Price County. Average depth is 15 feet, and maximum depth is 38 feet. The water is dark stained, but low turbidity from suspended algae keeps it moderately clear (Secchi depth = 7 feet). Clear water often corresponds with low nutrient levels. The substrate is composed of 78% rock, 15% muck, 5% gravel, and 2% sand, supporting a low density of submergent and emergent vegetation. The shoreland vegetation is 20% tamarack-spruce bog and the rest is upland hardwood and pine forest. With only three established residences much of the shoreline retains its natural character. Still, submerged woody cover is scarce. An intermittent stream drains to Holmes Creek from the southwest shore. An unimproved footpath on the right-of-way of Ring School Road and trails along the Park's frontage provide the only public access.

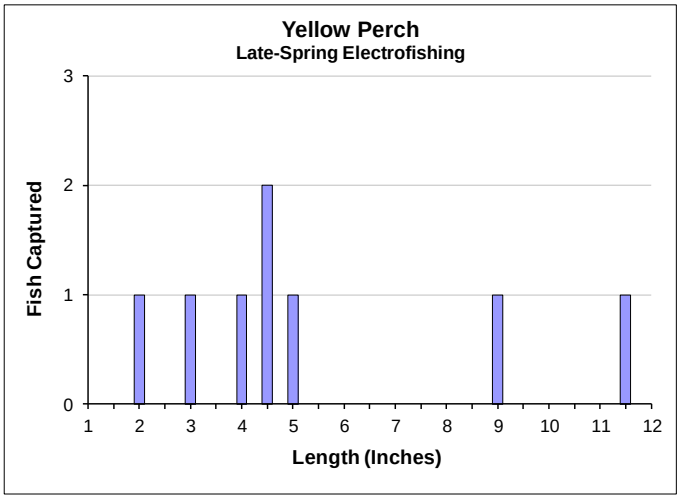
Summary of Results

Our electrofishing survey reaffirmed the inferences that we drew from our 2014 angling survey. Fish community composition and sportfish size and abundance were predictably similar to other small, soft water lakes with moderately low biological productivity in northern Wisconsin. Electrofishing captured only largemouth bass, bluegill, and yellow perch—a species richness ranking among the lowest we documented in contemporary surveys. Angling captured the same species and black crappie in summer 2014.

Yellow Perch

Late Spring Electrofishing

Captured 3.8 per mile or 7.9 per hour ≥ 5"	
Quality Size ≥ 8"	67%
Preferred Size ≥ 10"	33%
Memorable Size ≥ 12"	0%

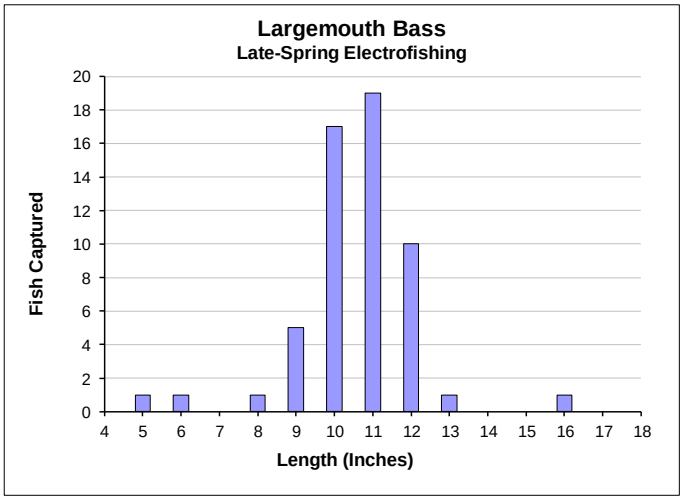


Although late spring electrofishing is not our preferred method of sampling yellow perch, we can cautiously say that yellow perch are present at low population abundance in Timms Lake. Though our sample was very small, it had an unusually high proportion of quality-size perch and one individual approaching memorable size. Young perch are the preferred forage of largemouth bass, and predation by abundant bass undoubtedly controls perch recruitment to keep perch growing at a satisfactory rate (unverified by age analysis). If limited fishing access keeps fishing pressure as low as we suspect, then perch should survive long enough to offer anglers opportunity to add a few decent size perch to their creel.

Largemouth Bass

Late Spring Electrofishing

Captured 68 per mile or 142 per hour ≥ 8"	
Quality Size ≥ 12"	22%
Legal Size ≥ 14"	2%
Preferred Size ≥ 15"	2%



Our high capture rate of largemouth bass by electrofishing indicates very high population abundance. Size structure was very poor with only one of 56 fish captured attaining legal size. In 2014 we used scales to analyze the length at age for largemouth bass and found that at ages 3 and 4 the growth rate of largemouth bass in Timms Lake trended near the regional averages, but growth of older bass slowed substantially. Average length at ages 5 and 6 trailed the regional average by 0.8 and 1.7 inch, respectively. Comparing the 2016 length distribution to the 2014 growth data, it appears that largemouth bass growth rates have not changed much. Largemouth bass are the top predator in Timms

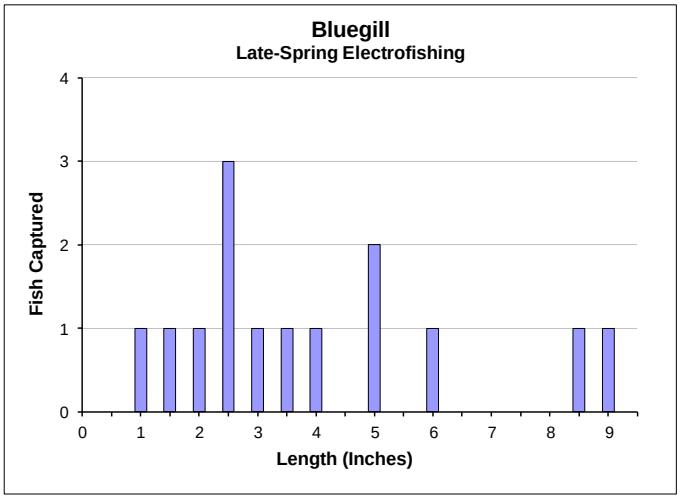
Illustrations by Virgil Beck

Lake, and in high numbers they successfully control bluegill and yellow perch densities. Anglers should enjoy fast bass fishing action, as long as size is not important to them.

Bluegill

Late Spring Electrofishing

Captured 10 per mile or 21 per hour ≥ 3"	
Quality Size ≥ 6"	38%
Keeper Size ≥ 7"	25%
Preferred Size ≥ 8"	25%



With sufficient predation by largemouth bass, bluegill population abundance is kept low, reducing food competition and allowing bluegills to grow fast enough to produce plenty of keeper- and preferred-size fish. Even though our sample was small, the bluegill population appears to be meeting our generic size objective that 5–10% of the stock should be at least 8 inches long. Anglers should not expect fast action when targeting bluegills, but they can expect a higher-than-average percentage of keepers.

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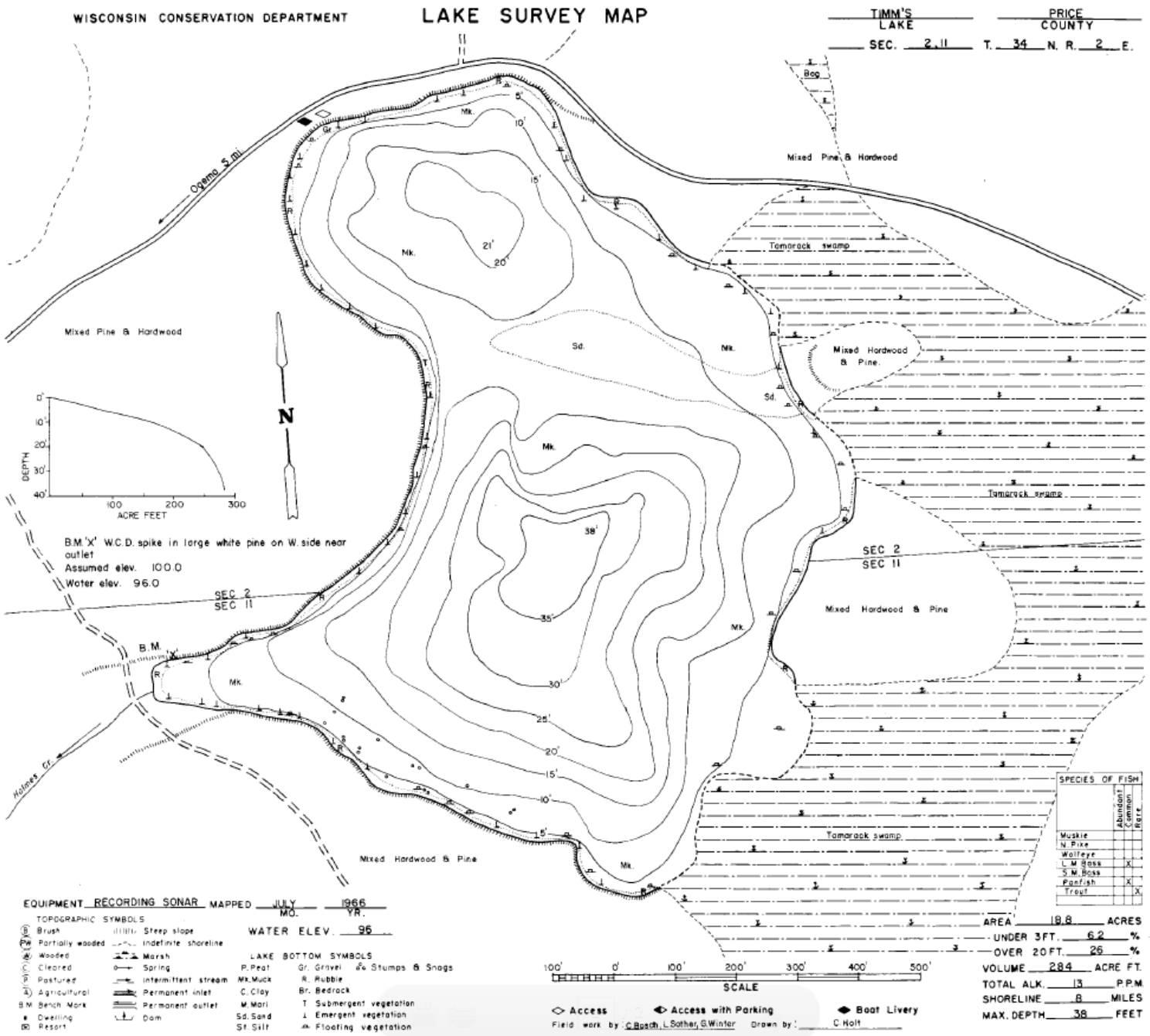
WISCONSIN CONSERVATION DEPARTMENT
LAKE SURVEY MAP
TIMM'S LAKE
PRICE COUNTY
SEC. 2, 11 T. 34 N. R. 2 E.
Ogema 5 mi.
Bog
Mixed Pine & Hardwood
Tamarack swamp
Mixed Hardwood & Pine
Mixed Pine & Hardwood
Mk.
Sd.
N
DEPTH
ACRE FEET
B.M. 'X' W.C.D. spike in large white pine on W. side near outlet
Assumed elev. 100.0
Water elev. 96.0
SEC 2
SEC 11
B.M.
Holmes Cr.
Mixed Hardwood & Pine
Tamarack swamp
SPECIES OF FISH
Abundant
Common
Rare
Muskie
N. Pike
Walleye
L.M. Bass
S.M. Bass
Panfish
Trout
EQUIPMENT RECORDING SONAR MAPPED JULY 1966
MO. YR.
WATER ELEV. 96
TOPOGRAPHIC SYMBOLS
Brush
Partially wooded
Wooded
Cleared
Pastured
Agricultural
Bench Mark
Dwelling
Resort
Steep slope
Indefinite shoreline
Marsh
Spring
Intermittent stream
Permanent inlet
Permanent outlet
Dam
LAKE BOTTOM SYMBOLS
P. Peat
Mk. Muck
C. Clay
M. Marl
Sd. Sand
St. Silt
Gr. Gravel
R. Rubble
Br. Bedrock
T Submergent vegetation
Emergent vegetation
Floating vegetation
Stumps & Snags
SCALE
Access
Access with Parking
Boat Livery
Field work by: C. Bosch, L. Sather, G. Winter
Drawn by: C. Holt
AREA 18.8 ACRES
UNDER 3 FT. 62 %
OVER 20 FT. 26 %
VOLUME 284 ACRE FT.
TOTAL ALK. 13 P.P.M.
SHORELINE 8 MILES
MAX. DEPTH 38 FEET